

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) A method of encoding an audio signal by representing at least part of said audio signal by a plurality of sinusoids, the method comprising the steps of:

performing, by a computer, an analysis on a first segment of said audio signal;

selecting, by the computer, candidate sinusoids based on said analysis;

defining, by the computer, for at least one of the candidate sinusoids a local frequency band around a frequency of said at least one candidate sinusoid;

combining, by the computer, amplitudes of frequency components within said local frequency band from which at least one of the candidate sinusoids within said local frequency band is excluded; and

selecting, by the computer, said candidate sinusoid as a selected sinusoid in dependence on the combination of amplitudes without regard to the at least one of the candidate sinusoids within said local frequency band that is excluded.

2. (Previously Presented) The method as claimed in claim 1, wherein a bandwidth of said local frequency band around the frequency of said at least one candidate sinusoid is defined in dependence on the frequency of said at least one candidate sinusoid.

3. (Previously Presented) The method as claimed in claim 2, wherein said dependence on the frequency of said at least one candidate sinusoid is based on a human's perception of audio.

4. (Previously Presented) The method as claimed in claim 1, wherein said candidate sinusoid is selected as a selected sinusoid when an amplitude of said candidate sinusoid is significant with regard to said combination of amplitudes, said significance being evaluated by thresholding a difference between the amplitude of said candidate sinusoid and a weighted mean amplitude of

frequency components within the local frequency band of said candidate sinusoid from which at least one of the candidate sinusoids within said local frequency band is excluded.

5. (Previously Presented) The method as claimed in claim 1, wherein said candidate sinusoid is selected as a selected sinusoid when an amplitude of said candidate sinusoid is significant with regard to said combination of amplitudes, said significance being evaluated by thresholding a ratio of:

a difference between the amplitude of said candidate sinusoid and a weighted mean amplitude of frequency components within the local frequency band of said candidate sinusoid from which at least one of the candidate sinusoids within said local frequency band is excluded; and

a weighted deviation of the amplitudes of frequency components within said local frequency band from which at least one of the candidate sinusoids within said local frequency band is excluded.

6. (Previously Presented) The method as claimed in claim 1, wherein the method further comprises a further selection out of the selected sinusoids which comprises the steps of:

determining for at least one of the selected sinusoids a phase consistency defined by an extent to which a phase of said selected sinusoid at a certain moment in time can be predicted from a phase of said selected sinusoid determined at another moment in time; and

further selecting said selected sinusoid as a further selected sinusoid when its phase consistency is above a predetermined threshold.

7. (Previously Presented) The method as claimed in claim 6, wherein the determination of the phase consistency of said selected sinusoid comprises the steps of:

segmenting a third segment of said audio signal into at least a first and a second part;

determining the actual phases of said selected sinusoid in at least the first and the second part;

using the actual phase in the first part to serve as the input for predicting the actual phase in the second part; and

determining the phase consistency of said selected sinusoid based on a prediction error between the actual phase and the predicted phase in the second part.

8. (Currently Amended) An audio encoder for encoding an audio signal by representing at least part of said audio signal by a plurality of sinusoids, the audio encoder comprising:

means for performing an analysis on a first segment of said audio signal;

means for selecting candidate sinusoids based on said analysis;

means for defining for at least one of the candidate sinusoids a local frequency band around a frequency of said at least one candidate sinusoid;

means for combining amplitudes of frequency components within said local frequency band from which at least one of the candidate sinusoids within said local frequency band is excluded; and

means for selecting said candidate sinusoid as a selected sinusoid in dependence on the combination of amplitudes without regard to the at least one of the candidate sinusoids within said local frequency band that is excluded.

9. (Previously Presented) The audio encoder as claimed in claim 8, wherein the audio encoder is adapted to perform a further selection out of the selected sinusoids, the audio encoder further comprising:

means for determining, for at least one of the selected sinusoids, a phase consistency defined by an extent to which a phase of said selected sinusoid at a certain moment in time can be predicted from a phase of said selected sinusoid determined at another moment in time; and

means for further selecting said selected sinusoid as a further selected sinusoid when the phase consistency of said selected sinusoid is above a predetermined threshold.

10. (Currently Amended) An audio system comprising:

means for obtaining an audio signal;

an audio encoder for encoding said audio signal by representing at least part of said audio signal by a plurality of sinusoids to obtain an encoded audio signal, the audio encoder comprising,

means for performing an analysis on a first segment of said audio signal,

means for selecting candidate sinusoids based on said analysis,

means for defining for at least one of the candidate sinusoids a local frequency band around a frequency of said at least one candidate sinusoid,

means for combining amplitudes of frequency components within said local frequency band from which at least one of the candidate sinusoids within said local frequency band is excluded, and

means for selecting said candidate sinusoid as a selected sinusoid in dependence of the combination of amplitudes without regard to the at least one of the candidate sinusoids within said local frequency band that is excluded; and

a formatting unit for formatting the encoded audio signal into a format suitable for storage and/or transmission.